Applicant: Jae-Young Jung Serial No.: 09/713,775

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In the claims:

Please amend the claims as follows:----

- 1. (Currently Amended) A martensitic stainless steel with high strength and high corrosion resistance comprising less than 0.06 wt.% C,/less than 2.5 wt.% Si, less than 2.5 wt.% Mn, 1.0-6.0 2.0-6.0 wt.% Ni, 10.0-19.0 13.0-19.0 wt.% Cr, 0.5-6.0 wt.% W, less than 3.5 wt.% Mo, less than 0.5 wt.% Nb, less than 0.5 wt.% V, less than 3.0 wt.% Cu, 0.11-0.25 wt.% N, and the remainder being Fe and minor impurities.
- 2. (Original) A martensitic stainless steel of claim 1 further comprising at least one of less than 0.8 wt.% Ti and/or 1.0 wt.% Ta.
- 3. (Currently Amended) A martensitic stainless steel with high strength and high to Corrosion resistance comprising less than 0.035 wt.% C, less than 2.0 wt.% Si, less than 2.0 wt.% Mn, 1.5-4.5 2.0-4.5 wt.% Ni, 12.0-16.0 13.0-16.0 wt.% Cr, 0.5-4.5 wt.% W, less than 2.5 wt.% Mo, less than 0.3 wt.% Nb, less than 0.3 wt.% V, less than 2.0 wt.% Cu, 0.11-0.25 wt.% N, and the remainder being Fe and minor impurities.
 - 4. (Original) A martensitic stainless steel of claim 3 further comprising at least one of less than 0.8 wt.% Ti and/or 1.0 wt.% Ta.
 - 5. (Currently Amended) A method for manufacturing a martensitic stainless steel with high strength and high corrosion resistance comprising the steps of:

casting a stainless steel that comprises less than 0.06 wt.% C, less than 2.5 wt.% Si, less than 2.5 wt.% Mn, 1.0-6.0 2.0-6.0 wt.% Ni, 10.0-19.0 13.0-19.0 wt.% Cr, 0.5-6.0 wt.% W, less than 3.5 wt.% Mo, less than 0.5 wt.% Nb, less than 0.5 wt.% V, less than 3.0 wt.% Cu, 0.11-0.25 wt.% N, and the remainder being Fe and minor impurities; and

submitting the cast stainless steel to an austenization heat treatment at a temperature of 800-1150°C and/or and tempering the stainless steel at a temperature of 350-575°C.

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6. (Original) A method of claim 5 wherein the stainless steel further comprises at least one of less than 0.8 wt.% Ti and/or 1.0 wt.% Ta.

7. (Currently Amended) A method for manufacturing a martensitic stainless steel with high strength and high corrosion resistance comprising the steps of:

casting a stainless steel that comprises less than 0.06 wt.% C, less than 2.5 wt.% Si, less than 2.5 wt.% Mn, 1.0 6.0 2.0 6.0 wt.% Ni, 10.0 19.0 13.0 19.0 wt.% Cr, 0.5 6.0 wt.% W, less than 3.5 wt.% Mo, less than 0.5 wt.% Nb, less than 0.5 wt.% V, less than 3.0 wt.% Cu, 0.11 - 0.25 wt.% N, and the remainder being Fe and minor impurities;

mechanically-processing the stainless steel such that work hardening is generated in the stainless steel; and

submitting the mechanically-processed stainless steel to an austenization heat treatment at a temperature of 800-1150°C and/or and tempering the stainless steel at a temperature of 350-575°C.

8. (Original) A method of claim 7 wherein the stainless steel further comprises at least one of less than 0.8 wt/% Ti and/or 1.0 wt.% Ta.